

Amendments to and Listing of the Claims:

Please amend claims 1, 3, and 4 so that the claims read as follows:

1. (currently amended) A material for a thermal fuse element wherein said material has an alloy composition consisting of Sn in an amount of greater than 46 weight % and less than or equal to 70 weight %, Bi in an amount of at least 1 weight % and less than or equal to 12 weight %, and In in an amount of at least 18 weight % and less than 48 weight % in which Sn is larger than 46% and 70% or smaller, Bi is 1% or larger and 12% or smaller, and In is 18% or larger and smaller than 48%.

2. (original) A material for a thermal fuse element wherein 0.1 to 3.5 weight parts of one, or two or more elements selected from the group consisting of Ag, Au, Cu, Ni, Pd, Pt, Sb, Ga, and Ge are added to 100 weight parts of an alloy composition of claim 1.

3. (currently amended) An alloy type thermal fuse ~~wherein a material for comprising a~~ thermal fuse element ~~has having~~ an alloy composition in which Sn is greater than 46 weight % and less than or equal to 70 weight %, Bi is at least 1 weight % and less than or equal to 12 weight %, and In is at least 18 weight % and less than 48 weight % of claim 1 is used as a fuse element, and wherein the composition does not intentionally contain an element which is harmful to a living body.

4. (currently amended) An alloy type thermal fuse ~~wherein a material for comprising a~~ thermal fuse element ~~wherein 0.1 to 3.5 weight parts of one, two or more elements selected from the group consisting of Ag, Au, Cu, Ni, Pd, Pt, Sb, Ga, and Ge are added to 100 weight parts of an alloy composition in which Sn is greater than 46 weight % and less than or equal to 70 weight %, Bi is at least 1 weight % and less than or equal to 12 weight %, and In is at least 18 weight % and less than 48 weight % of claim 2 is used as a fuse element, and wherein the composition does not intentionally contain an element which is harmful to a living body.~~

5. (original) An alloy type thermal fuse according to claim 3, wherein said fuse element contains inevitable impurities.

6. (original) An alloy type thermal fuse according to claim 4, wherein said fuse element contains inevitable impurities.

7. (original) An alloy type thermal fuse according to claim 3, wherein said fuse element is connected between lead conductors, and at least a portion of each of said lead conductors which is bonded to said fuse element is covered with an Sn or Ag film.

8. (original) An alloy type thermal fuse according to claim 4, wherein said fuse element is connected between lead conductors, and at least a portion of each of said lead conductors which is bonded to said fuse element is covered with an Sn or Ag film.

9. (original) An alloy type thermal fuse according to claim 5, wherein said fuse element is connected between lead conductors, and at least a portion of each of said lead conductors which is bonded to said fuse element is covered with an Sn or Ag film.

10. (original) An alloy type thermal fuse according to claim 6, wherein said fuse element is connected between lead conductors, and at least a portion of each of said lead conductors which is bonded to said fuse element is covered with an Sn or Ag film.

11. (original) An alloy type thermal fuse according to claim 3, wherein lead conductors are bonded to ends of said fuse element, respectively, a flux is applied to said fuse element, said flux-applied fuse element is passed through a cylindrical case, gaps between ends of said cylindrical case and said lead conductors are sealingly closed, ends of said lead conductors have a disk-like shape, and ends of said fuse element are bonded to front faces of said disks.

12. (original) An alloy type thermal fuse according to claim 4, wherein lead conductors are bonded to ends of said fuse element, respectively, a flux is applied to said fuse element, said flux-applied fuse element is passed through a cylindrical case, gaps between ends of said

cylindrical case and said lead conductors are sealingly closed, ends of said lead conductors have a disk-like shape, and ends of said fuse element are bonded to front faces of said disks.

13. (original) An alloy type thermal fuse according to claim 5, wherein lead conductors are bonded to ends of said fuse element, respectively, a flux is applied to said fuse element, said flux-applied fuse element is passed through a cylindrical case, gaps between ends of said cylindrical case and said lead conductors are sealingly closed, ends of said lead conductors have a disk-like shape, and ends of said fuse element are bonded to front faces of said disks.

14. (original) An alloy type thermal fuse according to claim 6, wherein lead conductors are bonded to ends of said fuse element, respectively, a flux is applied to said fuse element, said flux-applied fuse element is passed through a cylindrical case, gaps between ends of said cylindrical case and said lead conductors are sealingly closed, ends of said lead conductors have a disk-like shape, and ends of said fuse element are bonded to front faces of said disks.

15. (original) An alloy type thermal fuse according to claim 7, wherein lead conductors are bonded to ends of said fuse element, respectively, a flux is applied to said fuse element, said flux-applied fuse element is passed through a cylindrical case, gaps between ends of said cylindrical case and said lead conductors are sealingly closed, ends of said lead conductors have a disk-like shape, and ends of said fuse element are bonded to front faces of said disks.

16. (original) An alloy type thermal fuse according to claim 8, wherein lead conductors are bonded to ends of said fuse element, respectively, a flux is applied to said fuse element, said flux-applied fuse element is passed through a cylindrical case, gaps between ends of said cylindrical case and said lead conductors are sealingly closed, ends of said lead conductors have a disk-like shape, and ends of said fuse element are bonded to front faces of said disks.

17. (original) An alloy type thermal fuse according to claim 9, wherein lead conductors are bonded to ends of said fuse element, respectively, a flux is applied to said fuse element, said

flux-applied fuse element is passed through a cylindrical case, gaps between ends of said cylindrical case and said lead conductors are sealingly closed, ends of said lead conductors have a disk-like shape, and ends of said fuse element are bonded to front faces of said disks.

18. (original) An alloy type thermal fuse according to claim 10, wherein lead conductors are bonded to ends of said fuse element, respectively, a flux is applied to said fuse element, said flux-applied fuse element is passed through a cylindrical case, gaps between ends of said cylindrical case and said lead conductors are sealingly closed, ends of said lead conductors have a disk-like shape, and ends of said fuse element are bonded to front faces of said disks.

19. (withdrawn) An alloy type thermal fuse according to claim 3, wherein a pair of film electrodes are formed on a substrate by printing conductive paste containing metal particles and a binder, said fuse element is connected between said film electrodes, and said metal particles are made of a material selected from the group consisting of Ag, Ag-Pd, Ag-Pt, Au, Ni, and Cu.

20. (withdrawn) An alloy type thermal fuse according to claim 4, wherein a pair of film electrodes are formed on a substrate by printing conductive paste containing metal particles and a binder, said fuse element is connected between said film electrodes, and said metal particles are made of a material selected from the group consisting of Ag, Ag-Pd, Ag-Pt, Au, Ni, and Cu.

21. (withdrawn) An alloy type thermal fuse according to claim 5, wherein a pair of film electrodes are formed on a substrate by printing conductive paste containing metal particles and a binder, said fuse element is connected between said film electrodes, and said metal particles are made of a material selected from the group consisting of Ag, Ag-Pd, Ag-Pt, Au, Ni, and Cu.

22. (withdrawn) An alloy type thermal fuse according to claim 6, wherein a pair of film electrodes are formed on a substrate by printing conductive paste containing metal particles and a binder, said fuse element is connected between said film electrodes, and said metal particles are made of a material selected from the group consisting of Ag, Ag-Pd, Ag-Pt, Au, Ni, and Cu.

23. (original) An alloy type thermal fuse according to claim 3, wherein a heating element for fusing off said fuse element is additionally disposed.

24. (original) An alloy type thermal fuse according to claim 4, wherein a heating element for fusing off said fuse element is additionally disposed.

25. (original) An alloy type thermal fuse according to claim 5, wherein a heating element for fusing off said fuse element is additionally disposed.

26. (original) An alloy type thermal fuse according to claim 6, wherein a heating element for fusing off said fuse element is additionally disposed.

27. (original) An alloy type thermal fuse according to claim 7, wherein a heating element for fusing off said fuse element is additionally disposed.

28. (original) An alloy type thermal fuse according to claim 8, wherein a heating element for fusing off said fuse element is additionally disposed.

29. (original) An alloy type thermal fuse according to claim 9, wherein a heating element for fusing off said fuse element is additionally disposed.

30. (original) An alloy type thermal fuse according to claim 10, wherein a heating element for fusing off said fuse element is additionally disposed.

31. (original) An alloy type thermal fuse according to claim 11, wherein a heating element for fusing off said fuse element is additionally disposed.

32. (original) An alloy type thermal fuse according to claim 12, wherein a heating element for fusing off said fuse element is additionally disposed.

33. (original) An alloy type thermal fuse according to claim 13, wherein a heating element for fusing off said fuse element is additionally disposed.

34. (original) An alloy type thermal fuse according to claim 14, wherein a heating element for fusing off said fuse element is additionally disposed.

35. (original) An alloy type thermal fuse according to claim 15, wherein a heating element for fusing off said fuse element is additionally disposed.

36. (original) An alloy type thermal fuse according to claim 16, wherein a heating element for fusing off said fuse element is additionally disposed.

37. (original) An alloy type thermal fuse according to claim 17, wherein a heating element for fusing off said fuse element is additionally disposed.

38. (original) An alloy type thermal fuse according to claim 18, wherein a heating element for fusing off said fuse element is additionally disposed.

39. (withdrawn) An alloy type thermal fuse according to claim 19, wherein a heating element for fusing off said fuse element is additionally disposed.

40. (withdrawn) An alloy type thermal fuse according to claim 20, wherein a heating element for fusing off said fuse element is additionally disposed.

41. (withdrawn) An alloy type thermal fuse according to claim 21, wherein a heating element for fusing off said fuse element is additionally disposed.

42. (withdrawn) An alloy type thermal fuse according to claim 22, wherein a heating element for fusing off said fuse element is additionally disposed.

43. (withdrawn) An alloy type thermal fuse according to claim 3, wherein a pair of lead conductors are partly exposed from one face of an insulating plate to another face, said fuse element is connected to said lead conductor exposed portions, and said other face of said insulating plate is covered with an insulating material.

44. (withdrawn) An alloy type thermal fuse according to claim 4, wherein a pair of lead conductors are partly exposed from one face of an insulating plate to another face, said fuse element is connected to said lead conductor exposed portions, and said other face of said insulating plate is covered with an insulating material.

45. (withdrawn) An alloy type thermal fuse according to claim 5, wherein a pair of lead conductors are partly exposed from one face of an insulating plate to another face, said fuse element is connected to said lead conductor exposed portions, and said other face of said insulating plate is covered with an insulating material.

46. (withdrawn) An alloy type thermal fuse according to claim 6, wherein a pair of lead conductors are partly exposed from one face of an insulating plate to another face, said fuse element is connected to said lead conductor exposed portions, and said other face of said insulating plate is covered with an insulating material.

47. (withdrawn) An alloy type thermal fuse according to claim 7, wherein a pair of lead conductors are partly exposed from one face of an insulating plate to another face, said fuse element is connected to said lead conductor exposed portions, and said other face of said insulating plate is covered with an insulating material.

48. (withdrawn) An alloy type thermal fuse according to claim 8, wherein a pair of lead conductors are partly exposed from one face of an insulating plate to another face, said fuse element is connected to said lead conductor exposed portions, and said other face of said insulating plate is covered with an insulating material.

49. (withdrawn) An alloy type thermal fuse according to claim 9, wherein a pair of lead conductors are partly exposed from one face of an insulating plate to another face, said fuse element is connected to said lead conductor exposed portions, and said other face of said insulating plate is covered with an insulating material.

50. (withdrawn) An alloy type thermal fuse according to claim 10, wherein a pair of lead conductors are partly exposed from one face of an insulating plate to another face, said fuse element is connected to said lead conductor exposed portions, and said other face of said insulating plate is covered with an insulating material.

51. (withdrawn) An alloy type thermal fuse according to claim 3, wherein said fuse element connected between a pair of lead conductors is sandwiched between insulating films.

52. (withdrawn) An alloy type thermal fuse according to claim 4, wherein said fuse element connected between a pair of lead conductors is sandwiched between insulating films.

53. (withdrawn) An alloy type thermal fuse according to claim 5, wherein said fuse element connected between a pair of lead conductors is sandwiched between insulating films.

54. (withdrawn) An alloy type thermal fuse according to claim 6, wherein said fuse element connected between a pair of lead conductors is sandwiched between insulating films.

55. (withdrawn) An alloy type thermal fuse according to claim 7, wherein said fuse element connected between a pair of lead conductors is sandwiched between insulating films.

56. (withdrawn) An alloy type thermal fuse according to claim 8, wherein said fuse element connected between a pair of lead conductors is sandwiched between insulating films.

57. (withdrawn) An alloy type thermal fuse according to claim 9, wherein said fuse element connected between a pair of lead conductors is sandwiched between insulating films.

58. (withdrawn) An alloy type thermal fuse according to claim 10, wherein said fuse element connected between a pair of lead conductors is sandwiched between insulating films.